Fact sheet

DECLARED CLASS 1 PEST PLANT

Miconia

Miconia calvescens and all other miconia species

Four species of miconia have been found in Australia. All pose significant threats to our rainforests and are declared Class 1 pests in Queensland. All miconia species in Australia are targeted for eradication. *Miconia calvescens* (pictured above) has the potential to cause irreversible damage to our rainforests. Like other imported weeds, *M. calvescens* is capable of rampant growth and can produce hundreds of small berries every year which are attractive to birds and are spread long distances by these animals. Under favourable conditions, *Miconia calvescens* forms dense thickets in rainforest understoreys, potentially replacing native plants and affecting wildlife populations.

M. calvescens has become a major pest in the rainforests of Tahiti and Hawaii where it is known as the 'purple plague'. Overseas authorities have warned Australia that 'no expense should be spared to hunt this plant down and destroy it before you have a hopeless problem'. An eradication campaign is currently being managed in Queensland and New South Wales by Biosecurity Queensland (a business group of the Department of Employment, Economic Development and Innovation).

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Queensland Government

Declaration details

All miconia species (*M. calvescens, M. racemosa, M. nervosa* and *M. cionotricha*) are declared Class 1 pest plants under the *Land Protection (Pest and Stock Route Management) Act 2002*.

All landholders are required by law to keep their land free of Class 1 pests. It is a serious offence to introduce, keep or sell Class 1 pests without a permit.

Description and general information

M. calvescens is a small tree (up to 15 m), with large leaves up to 70 cm long. The underside of the leaves is a distinct, deep iridescent purple. Three large veins on each leaf, running from the base to the tip, can also help identify this plant.

The underside of a *Miconia calvescens* leaf. Note the large size and the iridescent purple colour

Flowering and fruiting of *M. calvescens* begins when the plant is 4–5 years old and normally takes place between February and September. Flowers are pink or white, approximately 5 mm long and occur in a large panicle that can contain 1000–3000 individual flowers. The ripe fruit are black to purple, 6 mm in diameter and contain up to 200 small seeds.

Fruit of *Miconia calvescens*

Flower panicles of *Miconia calvescens*

M. racemosa, M. nervosa and *M. cionotricha* are scrambling shrubs that may reach a height of about 3 m.

M. racemosa has leaves which can grow up to 20 cm long. Each leaf has five distinct veins that all begin and end at the same points at the base and tip. The smaller, transverse veins make a deep 'quilted' pattern on the leaf surface. Leaves form in opposite pairs.

Leaves of *Miconia racemosa*, showing the distinct three-lateral vein pattern

M. nervosa has leaves which have an elongated tip and can grow up to 25 cm long. The arrangement of veins shows two distinct points of intersection near the base of the leaf. The leaf surfaces have small hairs. The stems and underside of the leaf are a light red colour.

***Miconia nervosa* leaf**

M. cionotricha is not well known worldwide, and has been detected in only two isolated, managed locations in North Queensland. Contact Biosecurity Queensland on 13 25 23 for more information about *M. cionotricha* in North Queensland.

Distribution and potential spread in Australia

M. calvescens is the most common of the four species, with several infestations having been detected in North Queensland, and scattered detections in northern New South Wales.

M. calvescens has been present in Australia since the 1960s, when it was introduced to the Townsville Botanic Gardens. It was introduced to other botanical gardens along the east coast and was also sold by nurseries. Most *M. calvescens* infestations in Queensland have originated from garden plantings, and it has also been found at nurseries in northern New South Wales.

In Australia, *M. calvescens* has the potential to invade areas receiving a rainfall of 1800–2000 mm per year. This includes the coastal and inland areas of Queensland, northern New South Wales, Northern Territory and Western Australia.

Both known infestations of *M. racemosa* (near Kuranda, 2002) and *M. nervosa* (Whyanbeel, near Mossman, 2004) have been contained to single locations. No naturalised infestations of *M. cionotricha* have been detected in Australia.

Methods of spread

Because of its attractive foliage, *M. calvescens* has been subject to sale and distribution via gardeners. Its spread from gardens has mainly occurred via frugivorous (fruit-eating) birds.

Seed may also be spread by floating down watercourses, and via mud sticking to vehicles, machinery, footwear and animals.

Current status

In North Queensland, populations of *M. calvescens* have been detected between Mossman in the north, Malanda in the west, and Tully in the south. Scattered infestations have also been found in northern New South Wales.

All miconia species in Australia (with the exception of *M. cionotricha*) are targets of a national cost-shared eradication program being managed by Biosecurity Queensland. The eradication program relies on community support to detect and report infestations of miconia.

Control

All suspected infestations of any miconia species should be reported to Biosecurity Queensland, who will develop a site-specific eradication program with the relevant landholder.

Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland (call 13 25 23 or visit our website at www.biosecurity.qld.gov.au).

***Miconia calvescens* in fruit**

Dense *Miconia calvescens* infestation in Tahiti (Photo: J.-Y. Meyer, Délégation à la Recherche, Tahiti)

Cover photo left: Striking foliage of *Miconia calvescens*
Cover photo right: *Miconia calvescens* sapling

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